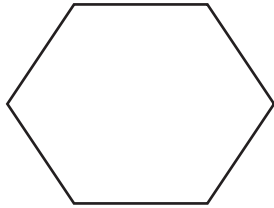


Sum of Interior Angles

Example:



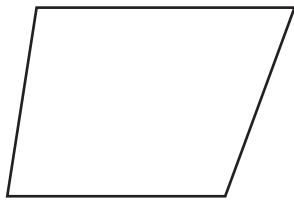
Sum of the interior angles = (Number of sides - 2) x 180°

$$= (6 - 2) \times 180^\circ$$

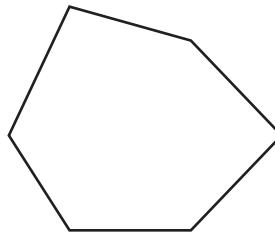
$$= 4 \times 180^\circ = \mathbf{720^\circ}$$

Find the sum of interior angles for each polygon.

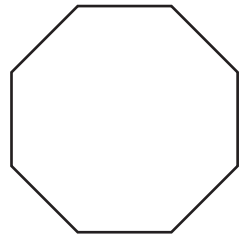
1)

Number of sides = Sum of the interior angles =

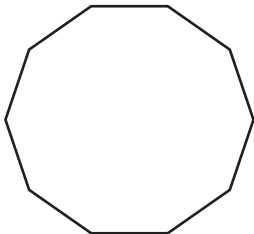
2)

Number of sides = Sum of the interior angles =

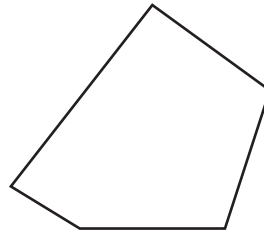
3)

Number of sides = Sum of the interior angles =

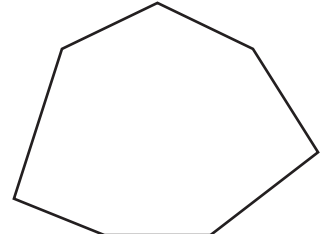
4)

Number of sides = Sum of the interior angles =

5)

Number of sides = Sum of the interior angles =

6)

Number of sides = Sum of the interior angles =

7)

regular 19-gon

Number of sides = Sum of the interior angles =

8)

regular 12-gon

Number of sides = Sum of the interior angles =

9)

regular 15-gon

Number of sides = Sum of the interior angles =

10)

regular 14-gon

Number of sides = Sum of the interior angles =

11)

regular 17-gon

Number of sides = Sum of the interior angles =

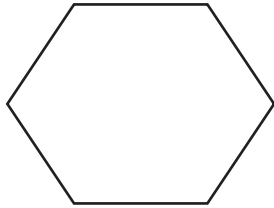
12)

regular 20-gon

Number of sides = Sum of the interior angles =

Answer key

Example:

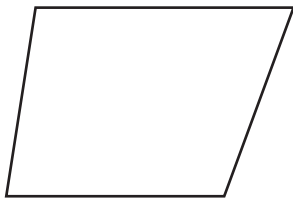
Sum of the interior angles = (Number of sides - 2) \times 180°

$$= (6 - 2) \times 180^\circ$$

$$= 4 \times 180^\circ = \mathbf{720^\circ}$$

Find the sum of interior angles for each polygon.

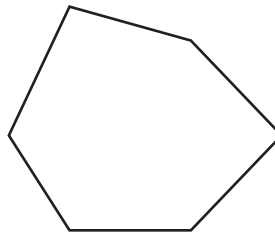
1)



Number of sides =

4

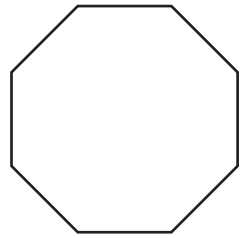
2)



Number of sides =

6

3)



Number of sides =

8

Sum of the interior angles =

 360°

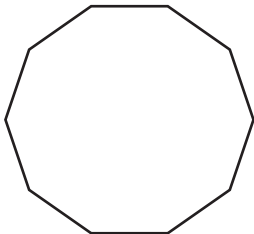
Sum of the interior angles =

 720°

Sum of the interior angles =

 1080°

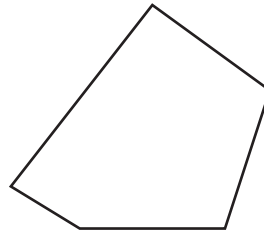
4)



Number of sides =

10

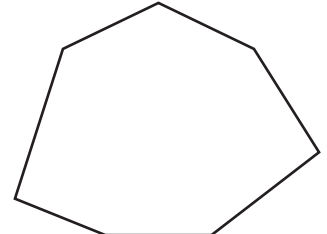
5)



Number of sides =

5

6)



Number of sides =

7

Sum of the interior angles =

 1440°

Sum of the interior angles =

 540°

Sum of the interior angles =

 900°

7)

regular 19-gon

8)

regular 12-gon

9)

regular 15-gon

Number of sides =

19

Number of sides =

12

Number of sides =

15

Sum of the interior angles =

 3060°

Sum of the interior angles =

 1800°

Sum of the interior angles =

 2340°

10)

regular 14-gon

11)

regular 17-gon

12)

regular 20-gon

Number of sides =

14

Number of sides =

17

Number of sides =

20

Sum of the interior angles =

 2160°

Sum of the interior angles =

 2700°

Sum of the interior angles =

 3240°